

U.S. Department of Energy

(08/05)

WEATHERIZATION ANNUAL FILE WORKSHEET

Expiration Date: 6-30-08

Grant: EE00195

Amendment: 002

State: MO

Program year: 2010

Budget period: 07/01/2009 - 06/30/2011

II.3 Subgrantees

Grantee	City	Tentative	
		Funding	Units
01-Community Services, Incorporated of Northwest Mo.	Maryville	475,638.00	60
02-Delta Area Economic Opportunity Corporation	Portageville	637,757.00	117
03-East Missouri Action Agency	Park Hills	617,809.00	216
05-Economic Security Corporation of Southwest Mo.	Joplin	602,652.00	111
06-Green Hills Community Action Agency	Trenton	329,161.00	60
07-Central Missouri Community Action	Columbia	713,096.00	115
08-Urban League of Metropolitan St. Louis	St. Louis	1,322,005.00	185
09-Jefferson-Franklin Community Action Corporation	Hillsboro	497,415.00	103
10-Kansas City Housing & Community Development Department	Kansas City	1,609,561.00	221
11-Community Action Agency of St. Louis County	St. Louis	1,268,482.00	327
12-Missouri Ozarks Community Action, Inc.	Richland	627,053.00	87
13-Missouri Valley Community Action Agency	Marshall	502,526.00	70
14-North East Community Action Corporation	Bowling Green	727,527.00	110
15-Northeast Missouri Community Action Agency	Kirksville	249,797.00	36
16-Ozark Action, Inc.	West Plains	508,547.00	104
17-Ozarks Area Community Action Corporation	Springfield	1,277,106.00	235
18-South Central Missouri Community Action Agency	Winona	468,187.00	110
19-West Central Missouri Community Action Agency	Appleton City	559,756.00	90
TOTALS		12,994,075.00	2,357

II.4 WAP Production Schedule

Total Units (excluding reweatherized)	2,310
Units by type (excluding reweatherized):	
Owner-occupied single-family site-built	
Single-family rental site-built	
Multi-family	
Owner-occupied mobile home	
Renter-occupied mobile home	
Shelter	
Units by occupancy:	
Elderly	
Persons with disabilities	
Native American	
Children	
High residential energy user	
Household with a high energy burden	
Other unit types:	
Rewatherized Units	47

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Average Unit Costs, including Reweathering, Subject to DOE Program Rules	
VEHICLES & EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)	
A	Total Vehicles & Equipment (\$5,000 or more) Budget
B	Total Units Weatherized
C	Total Units Reweatherized
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)
E	Average Vehicle & Equipment Acquisition Cost per Unit (A divided by D)
AVERAGE COST PER DWELLING UNIT (DOE RULES)	
F	Total Funds for Program Operations
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)
H	Average Program Operations Cost per Unit (F divided by G)
I	Average Vehicle & Equipment Acquisition Cost per Unit (from line E)
J	Total Average Cost per Dwelling (H plus I)

II.5 Energy Savings

Method used to calculate energy savings: WAP algorithm ☐ Other (describe below) ☒

The Missouri Department of Natural Resources Division of Energy (MDNR/DE) estimates that, for the Program Year 2009/2010 funding, a total of 2357 homes will be weatherized. For these homes, it is estimated that 62,564 mmBtu/year of energy will be saved.

Method for calculating energy savings is as follows:

For determining the energy savings by fuel type, data from the Oak Ridge National Laboratories' report "Estimating the National effects of the US Department of Energy's Weatherization Assistance Program with State Level Data: A Metaevaluation Using Studies from 1993 to 2005" (ORNL/CON-493).

Average energy savings for gas heated homes	30.5 mmBtu/yr/home	
Average energy savings for electric heated homes	6.6 mmBtu/yr/home	
Average energy savings of electricity for non heating purposes	2.1 mmBtu/yr/home	
Average energy savings for homes with combined gas heating and electric baseload savings	32.6 mmBtu/yr/home	

Data collected from the Missouri Weatherization agencies, Homes Complete Summary PY 2008.

Percent of homes with electric savings only	22%
Percent of homes with gas savings only	16%
Percent of homes with both gas and electric savings	62%

$.22 \times 2357 \text{ homes} \times 6.6 \text{ mmBtu/yr/home} = 3,422 \text{ mmBtu/yr}$
 $.16 \times 2357 \text{ homes} \times 30.5 \text{ mmBtu/yr/home} = 11,502 \text{ mmBtu/yr}$
 $.62 \times 2357 \text{ homes} \times 32.6 \text{ mmBtu/yr/home} = 47,640 \text{ mmBtu/yr}$
 Estimated PY 2009/2010 savings 62,564 mmBtu/yr

Estimated energy savings: 62,564 (MBtu)

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Estimated prior year savings: 47,221

Actual: 0

If variance is large, explain:

II.6 Training, Technical Assistance, and Monitoring Activities

The goals of the Missouri Low-income Weatherization Assistance Program are to provide effective management of federal, state and other funding; continuation of improved weatherization services, increased energy efficient housing, long-term reduction in utility bills and comfort and safety of those served.

Section II.6 herein describes specific training and technical assistance activities. Section III.4 of the "On file" Information describes the overall approach and includes (1) Assessment of training needs for local weatherization agencies and (2) Productivity of agencies and development of T&TA activities.

Local weatherization agencies and the Missouri Department of Natural Resources' Division of Energy (DNR/DE) had formed a past work group that assessed training needs and concluded that:

Training should be on-going

Training should be mandatory depending on job classification and certification requirements, voluntary in other instances

Training should include theory and hands-on approach

Training should be provided on a regional basis

Training should include a combination of training options

Training should include conferences and workshops

Training should include peer exchange

The DNR/DE encourages the network of local agency weatherization technicians to be trained in building science principals, building diagnostics, combustion heating systems and whole house best practices approach to cost effective energy efficiency measures. Technicians are required to demonstrate competency in knowledge and performance skills in these disciplines through the Building Performance Institute (BPI) testing and certification program.

Training providers are listed on the DNR/DE website with available training courses which focus on the following:

BPI Building Analyst

Building Science for Home Weatherization

Weatherization Training

Weatherization Inspector/Auditor Training

Auditing Mobile Homes

Combustion Systems

HVAC Service Technician

EPA Certified Renovator

Lead Safe Work Practice

OSHA 10

The Manufactured Home Energy Audit (MHEA) and the National Energy Audit Tool (NEAT) are available as part of the Weatherization Assistant.

On or after April 22, 2010, agencies and contractors addressing activities that disturb lead-based paint in target homes and child occupied facilities must follow the Environmental Protection Agency's (EPA) Renovation, Repair, and Paint (RRP) Final Rules (Section 402 (c) (3) of TSCA. New crewmembers and contractors are required to be trained within a six-month period. However, they cannot work on a home(s) with lead until becoming a Certified Renovator or being trained on site by a Certified Renovator. Refresher training is required every 5 years.

Training activities will include efforts on certification for Missouri weatherization technicians. It is important to provide a mechanism by which technicians may be certified in accordance with the Building Performance Institute (BPI). BPI has established technical standards and testing protocols for trade professionals to ensure efficiency and durability of the buildings they work on and the comfort and safety of the people who live in them. BPI-certified technicians are required to demonstrate competency in the knowledge and performance skills necessary to inspect, diagnose and troubleshoot building performance issues. Weatherization training for crew members and contractors will also be provided.

Beginning in program year 2005 each weatherization agency was required to have at least one BPI-certified auditor, Building Analyst I, on staff as part of a quality assurance program. Any subgrantees without the required trained and certified energy auditor must submit a corrective action plan to the DNR/DE before the DNR will award a subgrant for the subsequent program year.

Details regarding state program oversight and T&TA funding are contained in the standard federal 424 form: Federal Assistance

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Budget information Section A and B. Each subgrantee will be awarded a portion of T&TA funds based on the subgrantee's budgeted need and as approved by the DNR/DE. Local agency T&TA funds may only be used to pay for the cost associated with:

Crew member and contractor related training courses
BPI related training courses related to certification and re-certification
Local and State LIWAP-related meetings and training conferences
Regional and national LIWAP-related meetings and training conferences
Training on computers and software related to LIWAP operations
LIWAP training or assistance provided between local agency subgrantees.

Effectiveness of Training and Technical Assistance:

Surveys of training participants to rate course content, effectiveness of instruction and applicability to improved weatherization services

NEAT audit results and savings to investment ratio

Cost and quality of home energy retrofit

Housing quality monitoring inspections

Implementation of best practices and work quality standards

MONITORING ACTIVITIES:

DNR/DE monitoring activities span four distinct but interrelated areas of program operations:

1. Housing quality inspections
2. Production and expenditure reviews
3. Fiscal and program operations
4. Oversight of federal/state requirements and regulations

Implementing the MDNR/DE monitoring system involves:

A. Desk Monitoring

A Subgrantee is required to submit monthly reports to the DNR/DE that include the client's names, job numbers and other required information. The DNR/DE is in the process of implementation of a web-based database to assist with reporting, tracking, data retention, etc. This web-based system will assist with client file review (procedural and technical). The reporting, budget preparation, etc. will be performed through the web-based system and will prepare the reimbursements to SAM II electronically. With this web-based system, DNR/DE can determine compliance with:

- The federally designated expenditure categories.
- Actual expenditures versus planned expenditures.
- Overall expenditure rates by each Subgrantee.
- Characteristics of completed homes.
- Numbers of completed units per month.
- Numbers of persons and households by WAP targets.

Reimbursement to a Subgrantee is based on clear, accurate reporting of expenditures and clients served. DNR/DE provides each Subgrantee with an analysis of the monthly report. This includes feedback concerning specific problems a Subgrantee may be experiencing in its operations or in its compliance with grant requirements. Information collected is also used to target selected items for monitoring during field visits to a Subgrantee.

B. Procedural Monitoring

DNR/DE will visit each Subgrantee at least once each program year to review procedural, fiscal and compliance issues. DNR/DE will conduct a thorough review of the procedures of the Subgrantee by using a standardized and extensive monitoring protocol.

A risk assessment has been performed for the subgrantee agencies. Based on this assessment, the DNR/DE and DNR Internal Audit program has determined the various levels of procedural monitoring based on risk. If a subgrantee agency is determined as low risk, a review of 5% of client files for the program year will be reviewed during the procedural monitoring, with a minimum of 5 files reviewed. If a subgrantee agency is determined as medium risk, a review of 9% of client files for the program year will be reviewed during the procedural monitoring, with a minimum of 10 files reviewed. If a subgrantee agency

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is determined as high risk, a review of 18% of client files for the program year will be reviewed during the procedural monitoring, with a minimum of 15 files reviewed.

DNR/DE will review Subgrantee compliance with federal/state regulations and requirements as specified in the Missouri WAP Annual and Master files, the Missouri WAP Competitive Procurement Standards, and the DNR General Terms and Conditions for Federal Subgrants.

Annual independent audits will be reviewed to ensure audit financial schedules match financial reports submitted during the year.

C. Housing Quality Monitoring

A variety of items are reviewed by DNR/DE housing quality monitors during on-site visits.

1. DNR/DE will schedule an on-site visit(s) to a Subgrantee as necessary, but at least once per program year, to inspect the quality of work on the homes completed. A representative sample of completed homes will be inspected to determine whether or not the work reported and materials installed are in compliance with WAP standards.

DNR/DE has developed a risk assessment strategy which will be implemented in determining the number of homes to be inspected at each subgrantee agency. For agencies determined as low risk, a minimum of 5% of the total homes completed will be inspected. For agencies determined as medium risk, a minimum of 7.5% of the total homes completed will be inspected. For agencies determined as high risk, a minimum of 10% of the completed homes will be inspected.

DNR/DE will have the option to inspect additional houses when implementing new measures, or when other concerns arise. Inspection checklists are used to assist DNR/DE with on-site inspections. Additional information may be obtained or requested from the Subgrantee client files to document the findings of the monitoring visit. DNR/DE will inspect the following:

- Compliance with allowable WAP measures.
- Quality of work.
- Accuracy of the report concerning the amount of material installed on the home.
- Assurance that the initial energy audit and final inspection are appropriate, accurate and complete.
- Crew and contractor compliance with OSHA 10 and LSW training requirements.
- Worksite for compliance with required health and safety equipment, personal protection gear, and reference materials.

2. DNR/DE may also perform follow-up reviews of homes where additional work or corrective measures were required as a result of a past DNR/DE inspection.

3. Selected materials will be inspected to insure they meet federal specifications.

4. Pre-audits may be done to determine accuracy.

D. Independent Monitoring**1. Independent Fiscal Audit Review**

A Subgrantee is required to have an annual fiscal audit, in accordance with OMB Circular A-133. This audit shall document expenditures and compliance with regulations and requirements. The independent auditor shall use the schedules found in the WAP audit guide to present the required financial data. Findings are compared to the subgrant and monthly reports.

Client Education: See the Missouri Weatherization Operational Manual, Section 2, page 12.

II.7 DOE-Funded Leveraging Activities

Federal regulations allow weatherization funds to be used for leveraging activities. Under leveraging, subgrantees work at developing relationships with property owners, utility companies and other entities that generate non-federal resources for the program. Examples of some of the leveraging partnerships are donations from some local/national hardware and lumber stores, local realtors, etc. All Weatherization subgrantees participate in leveraging and partnership activities, although not all of them charge expenditures to the leveraging category for these activities. Non-federal resources are used to supplement the program and expand energy efficiency services and/or increase the number of dwelling units completed for weatherization

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eligible clients.

Subgrantee agencies are encouraged to budget an amount of funds the agency actually believes it will be able to use, not to exceed 5% of its grant allocation, for leveraging purposes. Subgrantee requests for leveraging must include specific planned leveraging activities; targeted partners (e.g., landlords, utilities, other agencies); and estimated outcomes including dollar amounts. If agencies do not initiate meaningful leveraging activities, the funds may be considered as state carryover, and may be redirected to other agencies.

II.8 Policy Advisory Council Members (names, groups, agencies)

10-Kansas City Housing & Community Development Department	Mr. Robert Jackson, Weatherization Director
16-Ozark Action, Inc.	Mr. Terry Sanders, Weatherization Director
Office of Public Counsel	Mr. Ryan Kind
Boone Electric Cooperative	Mr. Chris Rohlfing
Public Service Commission / Department of Economic Development	Ms. Anne Ross
Lieutenant Governor's Office	Mr. Richard Aubuchon
05-Economic Security Corporation of Southwest Area	Mr. John Joines
17-Ozarks Area Community Action Corp	Mr. Todd Steinmann, Weatherization Director
Missouri Gas Energy	Ms. Pam Levetzow
Vacancy	

II.9 State Plan Hearings (send notes, minutes, or transcript to the DOE office)

Hearing Date	Newspapers that publicized the hearings and the dates that the notice ran.
04/05/2010	Jefferson City News Tribune and Columbia Tribune

II.10 Adjustments to On-File Information

PY 2009 is the first year of the new 5-year WAP grant from the US DOE to DNR. The funding included is regular PY 2009, 2010 and supplemental Weatherization funding, and the grant period for this funding began July 1, 2009 and will end June 30, 2011.

DNR/DE periodically, but no less frequently than every 180 days, will evaluate subgrantees' rates of production and expenditure. If DNR/DE analysis shows that any subgrantee's rates of production and expenditure are substantially behind schedule, DNR/DE may recapture funds and redistribute them to other subgrantees with rates of production and expenditure on schedule or exceeding scheduled performance. Prior to recapture, subgrantees will be allowed to explain factors that contributed to low performance and present an action plan explaining actions the subgrantee has taken or will take to correct performance.

- The DNR/DE plans to utilize the \$6,500 average cost per home, including any inflationary adjustments.

The tentative allocations and number of homes are based on new funding distributed to subgrantees.

II.11 Miscellaneous

DNR/DE began using the NEAT audit on a statewide basis on July 1, 1994. The NEAT re-approval was obtained on 12/10/2003. Audit material was submitted in PY 2008 for validation.

Efforts will be made to have representation of low income persons, particularly handicapped and Native Americans on the

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PAC.

Technical Work Group: The state, working with the Professional Alliance, formed a Technical Work Group. This group will advise the state on various technical matters. The Technical Work Group is represented by:

Kevin Scherr, MDNR Division of Energy

Terry Sanders, Ozark Action, Inc., West Plains

Stephen Boniello, KC Housing & Community Development Department, Kansas City

Randy Martin, Economic Security Corporation, Joplin

Todd Steinmann, Ozarks Area Community Action Corporation, Springfield

The Technical Work Group will make technical recommendations regarding the Missouri Weatherization Program.

Disaster Plan

Declaration of a disaster for WAP purposes is determined by a Presidential or Gubernatorial order declaring either a Federal or State emergency. It may be the result of natural or man-made factors. It is the responsibility of the DNR/DE Weatherization Assistance Program, through its subgrantee network, to assist state and community authorities in normalizing areas affected by a disaster by providing WAP resources to assist Missouri low-income citizens in recovering and rebuilding after the disaster. The Weatherization Program will adhere to the following guidelines when responding to any disasters in which the low-income population has been affected. These guidelines are intended to maximize the assistance we are able to provide while protecting the limited resources of the program.

Disaster-mitigation planning activities shall be implemented as soon as practical after the declaration of a disaster. A WAP subgrantee shall not commit WAP resources (labor or financial) until it receives approval from the DNR/DE.

Any additional disaster-related funds will be allocated based on the extent of the disaster in each subgrantee area. Funds must supplement, not supplant, other funds available for disaster assistance. All funds received by the client to cover damages must be considered prior to the allocation of WAP resources. Attachment 2-3, the Disaster Certification form located at the end of this section, should be completed for each client requesting disaster assistance.

Safety measures, such as levees or other protections, should be in place prior to mitigation activities. Agency staff should consult with local utilities to ensure electric, gas and sewer hazards have been corrected or repaired.

A. Allowable Disaster Activities

Allowable disaster activities may include debris removal and other clean-up work in preparation for weatherization as well as normal weatherization services. If agency staff is assigned to another area of the state to assist in disaster activities, it will be the parent subgrantee's responsibility to maintain their salaries and to arrange for agency reimbursement. The following ECM priority list is recommended for disaster homes.

Labor for gutting damaged components of the house and debris clean up.

Primary heating system replacement and repair (including ductwork repair; replacement, cleaning and sealing of all joints; and venting, flue and chimney replacement, repair and cleaning).

Domestic water heaters (venting and flues included).

Window and door repair and/or replacement.

Air sealing (basic infiltration and exfiltration work).

Attic insulation and ceiling coverage.

Wall insulation.

Restoration of electrical power (from electrical meter into the house).

Increased Incidental and Repair costs (DOE approval must be given).

Specific procedures to weatherize mobile homes under the disaster provisions are found in Attachment 2-3 of the Missouri Weatherization Operational Manual.

B. Eligibility Requirements

WAP subgrantees must ensure that applicants for disaster assistance (1) meet the current eligibility requirements, (2) are

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located within the designated disaster area and (3) have been directly affected by the disaster. Homes located in a FEMA-sanctioned area are not eligible for assistance.

Applicant homes must be certified as habitable, and a disaster certification form must be completed, signed and retained in the client file. The owner of a rental unit must list the property with Section 8 or provide other proof that the unit will remain exclusively for the low-income. A landlord contribution, based on a sliding scale, will be required (if a landlord contributes a furnace or other material, its value can be counted toward the contribution).

Client income eligibility may be based on one month's income. The fuel priority selection criteria allows for up to 100 points for disaster clients. Victims needing heating system or water heater repair or replacements will be served first.

Disaster-damaged homes may be re-weatherized without regard to the initial date of weatherization if the damage is not covered by insurance. Victims may receive repair or replacement to domestic hot water heaters as a health-and-safety measure. Repairs to the building structure that exceed the DOE average expenditure per home limits must be approved by the state.

C. Equipment Procurement

All purchased items should meet minimum energy-efficiency ratings as detailed in 10 CFR 440, Appendix A. Subgrantees must comply with all requirements specified in 10 CFR Parts 600 and 440, OMB A-87 (if applicable), OMB A-122 (if applicable), and the requirements specified in the MDNR General Terms and Conditions for Federal Subgrants, Missouri Weatherization Operational Program Manual's Competitive Procurement Standards.

D. Additional Funding

If additional funds are received from the department or other fund sources, a subgrantee may allocate up to \$10,000 per unit. If no additional funds are received, the state plan cost limits apply. Program operations money may be used to support mitigation and clean-up activities. No additional administrative funds will be provided for disaster work.

E. Disaster Expenditures Accountability and Reporting

Disaster expenditures must be accounted for and reported separately from other costs. The monthly report must show these expenses under "other". The costs will not be included in the averages. Program year budget adjustments must be submitted to the DNR/DE within 30 days of the date of the incurred costs.